

Carrying Capacity & Ecological Footprints

3.7.1 Explain the difficulties in applying the concept of carrying capacity to local human populations

3.8.1 Explain the concept of an ecological footprint as a model for assessing the demands that human populations make on their environment

CARRYING CAPACITY

individuals or species that an environment can support*.

Actual amount based on data (Humans don't know our C.C. because we keep changing it with technology)

C.C. is where a pop. can sustainably be maintained.

Carrying Capacity Can't be changed (humans are the exception)

- ↓ population to ↓ resource use
- technology to intensify land use
- use less resources
- recycling resources
- reusing resources
- improving efficiency of resource use
- ↓ amount of pollution produced
- Export wastes to other countries
- ↑ technology to ↑ C.C.
- import resources from other countries

Ecological Footprint

Area of land & water required to support* an individual or population

Theoretical # (ex. your life style takes 6 Earths to maintain—there will never be 6 Earths to check this)

E.F. is not necessarily sustainable, & is often not.

* E.F. Can be changed:

- ↑ more use of fossil fuels
- more use of technology & thus more energy
- high levels of imports (↑ transportation)
- ↑ per capita production of carbon waste.
- large capita consumption of food
- ↑ meat-rich diet